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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|-----------------------|---------------------|------------------|
| 09/855,681  | 05/16/2001  | Toshihiro Tsurugasaki | ASA-1000            | 1552             |
| 24956   | 7590        | 01/26/2005            | EXAMINER            |                  |
| MATTINGLY, STANGER & MALUR, P.C.<br>1800 DIAGONAL ROAD<br>SUITE 370<br>ALEXANDRIA, VA 22314 |             |                       | TANG, KUO LIANG J   |                  |
|   |             |                       | ART UNIT            | PAPER NUMBER     |
|   |             |                       | 2122                |                  |

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/855,681

**Applicant(s)**

TSURUGASAKI, TOSHIHIRO

**Examiner**

Kuo-Liang J Tang

**Art Unit**

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. This Office Action is in response to the amendment filed on 9/21/2004.

***Priority***

2. The examiner acknowledges the claim for priority of the submitted certified copy of the priority document, JP 2000-152665. The priority date for this application is 5/18/2000.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Claims 1-4 and 6-10 are amended. Claims 11-12 are added.

Claims 1-12 are pending and have been examined.

Claims 1-10 remain rejected under 35 U.S.C. 102(b) as being anticipated by Lauterbach, "Trace32 RTOS Debugger for pSOS+", <http://www.lauterbach.com>, 1999.

*In the remarks, the applicant argues that:*

- I) As for independent claims 1, 8 and 10, the Applicant argues that TRACE32 system does not disclose updating the display to indicate the operation state of each process when detecting the operation state change (see RE page 10, lines 3-7).

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II) Applicants argues that task list does not indicate the relationship between the tasks (see RE page 11, lines 14-15).

**Examiner's response:**

I) The examiner disagrees with Applicants' assertion that TRACE32 system does not disclose updating the display to indicate the operation state of each process when detecting the operation state change. In fact, in page 5, "Statistics and flow tasks" figure, TRACE32 does teaches showing state change from active to non-active state using graphic symbol bar and line.

II) The examiner disagrees with Applicants' assertion that TRACE32 system does not disclose that task list does not indicate the relationship between the tasks. In fact, in page 5, "Statistics and flow tasks" figure, TRACE32 does teaches showing state change from active to non-active state using graphic symbol bar and line. The relationship between tasks is active and non-active state.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Lauterbach, "Trace32 RTOS Debugger for pSOS+", <http://www.lauterbach.com>, 1999.

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As Per Claim 1, Lauterbach teaches that the TRACE32 System includes a configurable multitask debugger to provide symbolic debugging in real time operating systems. The software package contains a ready-to-run configuration for the pSOS+ Real Time Kernel from Integrated Systems. (E.g. see page 1). In that Lauterbach discloses the method that covering the steps of:

“monitoring and detecting (E.g. see page 2, Figure “Terminal window to the pSOS+ debugger pROBE+” , column “Susp” and associated text) an operation state change of each process into the debugger system;” (E.g. see page 2, Figure “Terminal window to the pSOS+ debugger pROBE+” , column “Status” and associated text);

```

> Mode  Status Susp?
-----
0000 Ready
0000 WkAfter
0000 Running
0002 Ready
0002 Ready
0000 Ready YES
0000 WkAfter
0002 Ready
0002 Ready

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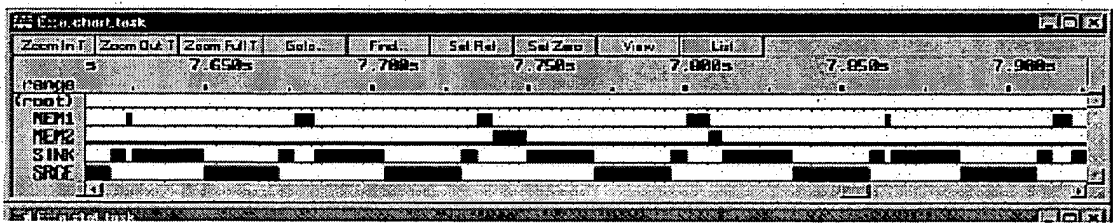
“acuring the detected operation change of each process into the debugger system” (E.g. see page 2, Figure “Terminal window to the pSOS+ debugger pROBE+” , column “Susp” and associated text);

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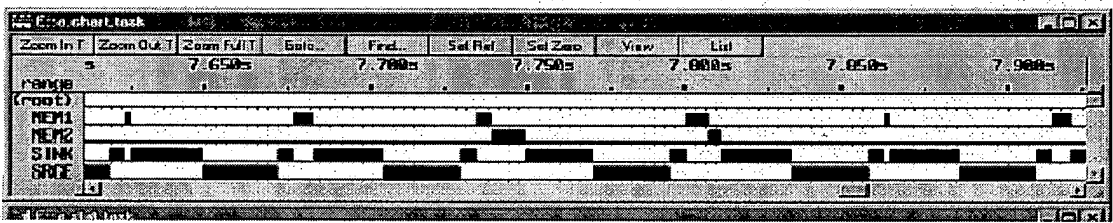
> Mode  Status Susp?
-----
0000 Ready
0000 WkAfter
0000 Running
0002 Ready
0002 Ready
0000 Ready YES
0000 WkAfter
0002 Ready
0002 Ready

```

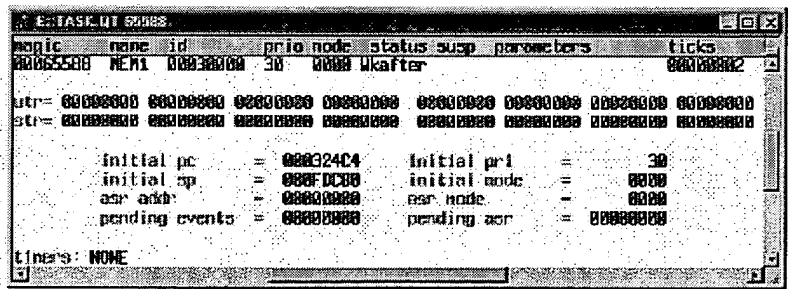
“representing each process using a predetermined graphic symbol;” (E.g. see page 5, Figure “Statistics and flow of tasks” and associated text);



“representing a relationship between the processes using a layout of graphic symbols and lines therebetween;” (E.g. see page 5, Figure “Statistics and flow of tasks” and associated text);  
and



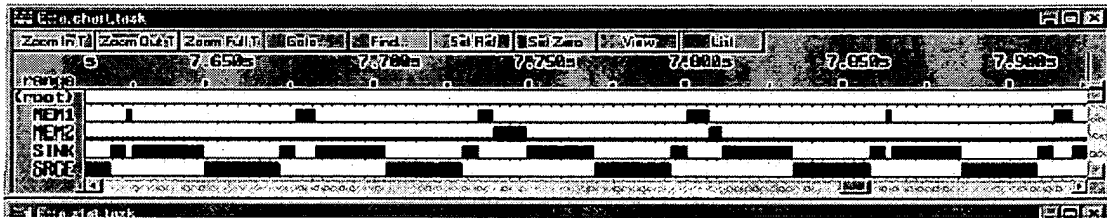
“representing the operation state of each process using a particular display mode for the graphic symbols.” (E.g. see page 3, Figure “Task list window and detailed window of one specific task” and associated text).



Task list window and detailed window of one specific task

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“updating the display mode indicating the operation state of each process when detecting the operation state change”. (E.g. see page 5, Figure “Statistics and flow of tasks” and associated text); and

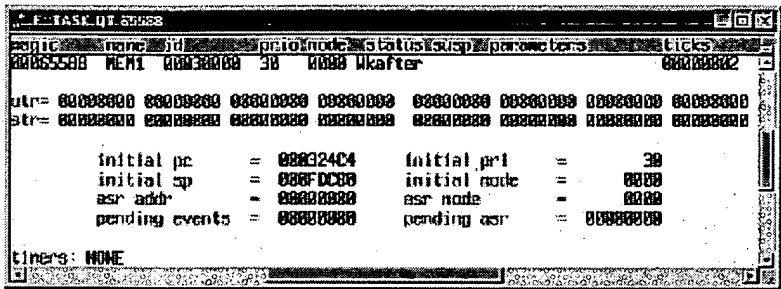


As Per claim 2, the rejection of claim 1 is incorporated and further Lauterbach teaches:

“the step of acquiring detailed information of each process together with the operation state change thereof into the debugger system and displaying and updating the detailed information.” (E.g. see page 3, Figure “Task list window and detailed window of one specific task” and associated text).

As Per claim 3, the rejection of claim 2 is incorporated and further Lauterbach teaches:

“storing an operation state change reported from each process in a table for each process wherein the operation state change is detected by monitoring the table” (E.g. see page 3, Figure “Task list window and detailed window of one specific task” and associated text) and



Task list window and detailed window of one specific task

(E.g. see page 2, Figure “Terminal window to the pSOS+ debugger pROBE+”, column “Susp” and associated text).

| Mode | Status  | Susp? |
|------|---------|-------|
| 0000 | Ready   |       |
| 0000 | WkAfter |       |
| 0000 | Running |       |
| 0002 | Ready   |       |
| 0002 | Ready   |       |
| 0000 | Ready   | YES   |
| 0000 | WkAfter |       |
| 0002 | Ready   |       |
| 0002 | Ready   |       |

As Per claim 4, the rejection of claim 1 is incorporated and further Lauterbach teaches:

“wherein the relationship between the processes is a parent-child relationship or a brother relationship and the relationship is displayed in a family-tree form” (E.g. see page 3, Figure “Task list window and detailed window of one specific task”, column “prio” and associated text).

Examiner interprets that the task/process with the same priority has a brother relationship.

| id       | prio | node | status  |
|----------|------|------|---------|
| 00010000 | 00   | 0000 | Ready   |
| 00030000 | 30   | 0000 | WkAfter |
| 00040000 | 2F   | 0000 | Running |
| 00050000 | 1E   | 0002 | Ready   |
| 00060000 | 1E   | 0002 | Ready   |
| 00070000 | 00   | 0000 | Ready   |
| 00080000 | 50   | 0000 | WkAfter |
| 00090000 | 10   | 0002 | Ready   |
| 000A0000 | 10   | 0002 | Ready   |



As Per claim 5, the rejection of claim 1 is incorporated and further Lauterbach teaches:

“wherein the operation states of each process include generation, start, halt, resume, and end of the process.” (E.g. see page 2, Figure “Terminal window to the pSOS+ debugger pROBE+”, column “Status” and associated text).

| Node | Status  | Susp? |
|------|---------|-------|
| 0000 | Ready   |       |
| 0000 | Waiter  |       |
| 0000 | Running |       |
| 0002 | Ready   |       |
| 0002 | Ready   |       |
| 0000 | Ready   | YES   |
| 0000 | Waiter  |       |
| 0002 | Ready   |       |
| 0002 | Ready   |       |

As Per claim 6, the rejection of claim 2 is incorporated and further Lauterbach teaches:

“wherein the operation state display and the detailed information display are conducted on one screen.” (E.g. see page 3, Figure “Task list window and detailed window of one specific task” and associated text).

As Per claim 7, the rejection of claim 2 is incorporated and further Lauterbach teaches:

“wherein the operation state display and the detailed information display are performed, in response to operation of a mouse/keyboard indicating one of the processes on either one of the displays, in an emphasized mode in relation to each other.” (E.g. see page 3, Figure “Task list window and detailed window of one specific task” and associated text).

As Per Claim 8, is the system claim corresponding to the method claim 1 and is rejected under the same reason set forth in connection of the rejection of claim 1.

As per Claim 9, the rejection of claim 8 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 2.

As Per Claim 10, is the program storage device readable claim corresponding to the method claim 1 and is rejected under the same reason set forth in connection of the rejection of claim 1.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Correspondence Information***

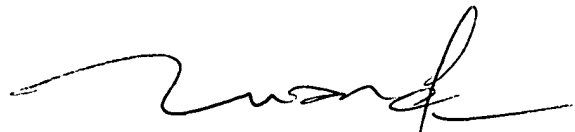
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang J Tang whose telephone number is (571) 272-3705. The examiner can normally be reached on 8:30AM - 7:00PM (Monday – Thursday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Kuo-Liang J. Tang*

Software Engineer Patent Examiner



**TUAN DAM**  
**SUPERVISORY PATENT EXAMINER**